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ABSTRACT

Legal employment test precedent cited by courts and employment-related law cited by plaintiffs during teacher certification test (TCT) decisions are discussed to determine their pertinence to test content validity issues. The two main documents involved in such litigation are the "Uniform Guidelines on Employee Selection Procedures" (1978) and the "Questions and Answers to Clarify and Provide a Common Interpretation of the Uniform Guidelines on Employee Selection Procedures" (1979). Case law pertinent to Title VII of the Civil Rights Act of 1964, which is explicated by the "Guidelines" and "Questions", and to the 14th Amendment to the U.S. Constitution is cited and discussed. Two case reviews indicated that there was an increased emphasis on the conformity of job analyses to professional standards. Guidelines are outlined. As TCT precedent is set, it appears likely that the adequacy of the job analyses that are used to define the content domain to be tested will be scrutinized using criteria defined in the broader employment test setting. Validation issues in high-stakes testing are likely to remain a public spectacle, but codification within the courts will proceed in any event. (TJH)

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Court-defined Job Analysis Standards in Content Validation

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Cronbach (1988) tells us that, "Validation was once a priestly mystery, a ritual behind the scenes, with the professional elite as witness and judge. Today it is a public spectacle combining the attractions of chess and mud wrestling." With the proliferation of tests used in employment and other selection procedures and the proliferation of competency testing in the current educational reform movement, increasingly validity or lack of validity is decided publicly in court and becomes a public spectacle in the news media. Those of us engaged in test development and use should anticipate the need to be ready to play chess and mudwrestle in court. The focus of this paper is the review of some legal issues related to employment testing in general and to teacher licensure testing more specifically. We will argue that employment testing standards apply to teacher licensure tests and therefore job analysis standards should be considered in test development and validation.

The Standards (1985, Standards for Educational and Psychological Testing, APA) have separate chapters on employment and licensure/certification testing. Under employment testing, Standard 10.4 states:

> Content validation [of an instrument or procedure] should be based on a thorough and explicit definition of the content domain of interest. For job selection, classification, and promotion, the characterization of the domain should be based on job analysis. (p. 60)

In the licensure/certification chapter, Standard 11.1 states that:

> The content domain to be covered by a licensure or certification test should be defined clearly and explained in terms of the importance of the content for competent performance in an occupation....Job analyses provide the primary basis for defining the content domain....Generally, knowledge and skills contained in a core curriculum designed to train people for the job or occupation are relevant. (p. 64)

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For the purposes of this paper, the issue of whether teacher tests are really licensure or certification tests will not be addressed. Arguments are presented in the literature on both sides (Mehrens, 1987; Strassle, 1985; Curtis, 1986). Law review articles cited here all refer to teacher competency or minimum competency tests. Generally the tests are known as teacher certification tests (TCTs) and we will use that term. The tests are unlike licensure tests in law or medicine in that the state instead of the profession controls the licensing of teachers, and the state is in some sense the employer of the teachers it licenses. As a result, TCTs are more like employment tests than licensure tests, and as we will argue here, are treated more like employment tests by the courts. That is, courts cite employment test precedent in TCT decisions and plaintiffs bring suit under employment-related law.

The Applicability of the Employment-Related Law

In employment testing cases, the courts apply standards set forth in the Uniform Guidelines on Employee Selection Procedures (1978), which are the result of civil rights legislation. Briefly, the Civil Rights Act of 1964 specifies in Title VII that an employer cannot discriminate against employees in any aspect of employment decisions. The interpretation of Title VII was elaborated by the Supreme Court decision of Griggs v. Duke Power Co. (1971) in which the Court prohibited employment practices (selection tests) that were not job-related. In 1972, Congress further supported the requirements of job-relatedness with the passage of the Equal Employment Opportunity Act, an amendment of Title VII. The Equal Employment Opportunity Commission (EEOC) has issued a series of guidelines for implementation of the Civil Rights Act, the latest version being the Uniform Guidelines (1978). This document and its companion, the Questions and Answers to Clarify and Provide a Common Interpretation of the Uniform Guidelines on Employee Selection Procedures, 1979, the Questions, require that evidence of validity of a selection procedure be proven if the procedure adversely impacts the selection of minority group employees or job candidates. Validity will also be evaluated by the court under successful 14th Amendment challenges, although the criteria applied are not apparently as stringent.

Although there is not agreement among measurement experts that the Uniform Guidelines apply to licensure tests, the Questions state that this document does apply to licensing and certification boards and licensing and certification functions of state and local governments when such licensing and certification may deny employment opportunity (p. 11997). More importantly, all the TCT cases and legal articles reviewed here cite employment test precedent in the decisions and arguments. All the TCT cases we reviewed (twelve) except two were filed under Title VII complaints (as well 14th Amendment). If the courts

treat TCTs as employee selection procedures, we are compelled to construct them and defend them as employee selection procedures. If it walks like a duck and quacks like a duck, it must be an employment test.

How the 14th Amendment and Title VII Apply

Under the 14th Amendment, tests may be challenged because of denial of procedural or substantive due process to test takers. Although such a challenge is not likely to succeed for TCTs, in at least one case (U.S. v. State of Texas, 1985), a preliminary injunction was granted to prevent the use of the Pre-Professional Skills Test (PPST, ETS) by the Texas Education Agency in part because of denial of due process rights of reasonable notice of the testing requirement to those prospective teachers required to pass it.

A more likely 14th Amendment challenge is under the equal protection clause which guarantees protection from arbitrary classification that may result in differential treatment. If the plaintiffs are able to show intentional discrimination by the state, the courts apply a 'strict scrutiny' review of test use. The test then cannot be used unless the state can prove that there is a compelling or overriding state interest to continue test use. If the plaintiffs cannot show intentional discrimination, the test can continue to be used if its use bears a 'rational relationship' to legitimate state interest. Although courts are not likely to infer discriminatory intent, in at least one TCT case such intent was inferred. In Baker et al. v. Columbus Municipal Separate School District (1971), and in its appeal in 1972, the courts ruled that the use of the NTE constituted purposeful discrimination on the part of the Columbus, Mississippi, school district because the district had used the test for the previous three years in a merit pay program and had evidence of its racially disproportionate results.

Under the rational relationship scrutiny, courts consider test validity, but not apparently as stringently as they do under Title VII Uniform Guidelines requirements. Even though courts are generally reluctant to interfere with educational policy (Swiger & Zehr, 1984), an improperly validated test or cutoff score will not withstand the rational relationship scrutiny in court. The state's need to improve public education will not outweigh test use that has not been validated.

Title VII challenges are considered under a three-part analysis. First, plaintiffs must show that the test use has had a significant discriminatory effect. The burden then shifts to the defendants to show through validation that the test is job-related or is a business necessity. It is at this point that the adequacy of the job analysis is critical to the validity and job-relatedness argument. An inadequate job analysis cannot support test validity. Third, if job-relatedness (validity) is established, the test will remain in place unless plaintiffs can show that some other selection procedure with no adverse impact

on minority group members is available to the state.

A prerequisite to application of these three steps is the establishment of an employer-employee relationship between the teachers and the state or school board. While local school boards are certainly employers under Title VII, they argue that they are only upholding state certification requirements, not creating them. It is not necessarily the case that the state board of education is also an employer under Title VII. However, Strassle (1985) states that, "Given the underlying purpose of Title VII to provide equal employment opportunities, courts should be reluctant to construe requirements for the applicability of Title VII so rigorously that all defendants may avoid liability" (p. 514). She concludes that courts are likely to interpret employment opportunity "broadly, finding Title VII to apply in cases where applicants have been denied teacher certification based on minimum competency test scores" (p. 515).

Law Reviews

All five law review articles we located on teacher testing (Swiger & Zehr, 1984; Strassle, 1985; Noble, 1985; Curtis, 1986; and Galbreath, 1988) cited employment testing cases as relevant precedent in TCT litigation and Title VII as appropriate to challenging such tests. In fact, Strassle describes Title VII as, "the most promising means for challenging the use of competency test scores for certification" (p. 496). Pyburn (1989), writing recently about the larger class of licensing exams that includes the many challenges to the bar exam, stated that, "a number of federal courts have ruled that Title VII does not apply to state licensing agencies and their exams" and that "the courts have refused to apply Title VII principles to licensing exams" (p. 4). We believe that to apply his conclusions to teacher licensure tests, however, would be in error since, as argued above, they function more like employment tests than licensure tests (such as the bar exam) because the state (or local school boards) can qualify as having an employer-employee relationship to teachers, which is a prerequisite of Title VII applicability.

Strassle (1985) notes that, "Courts have extended Title VII protection beyond a traditional employer-employee relationship..." (p. 511) and that,

> The quasi-professional status of teaching distinguishes teacher certification cases from professional licensing cases. This quasi-professional status removes teacher certification from the realm of professional licensing (p. 513).

TCT Cases

We were able to gather information about twelve cases

related to TCTs. These are not all precedent-setting cases since some were settled out of court (Georgia) and some were neither brought to trial nor settled out of court, but were dropped for other reasons (Arkansas). Nevertheless, it is important to note that for ten of the twelve, suit was brought under Title VII civil rights violations. Ten were also brought under 14th Amendment due process and/or equal protection violations. One case was filed under Title VII complaints only, and another was brought under state constitution violations (Texas, TECAT). This test has since been ruled discriminatory by the EEOC and its use may result in Title VII litigation. All the written decisions we reviewed cited employment test case precedent. Table 1 summarizes some relevant information about the cases we have considered.

Table 1 Here

Content Validity

In general, for employment and licensure tests of job knowledge and skills, a content validity argument is made by developers and users (Kane, 1989). As noted above, the Standards state that both job analyses and the core curriculum are relevant bases for defining the test content domain. The Uniform Guidelines are clear that job analysis provides the basis of the job-relatedness argument for tests. Generally, in the TCT cases we reviewed, the cases related to NTEs (National Teacher Examinations, Educational Testing Service) challenged the arbitrary setting of cutoff scores, while cases involving other test developers and tests developed by the states themselves challenged the job-relatedness of the tests. Both are validity issues. In the landmark challenge of the NTE use in South Carolina (United States v. South Carolina, 1977) the validity of the test use was upheld through a validation study that showed the match of test content to the curriculum of the teacher training programs in the state and set cutoff scores for the fields being tested. However, later cases have challenged not only cutoff scores but also the content knowledge tested, and job analyses have become increasingly important to the content validity argument for TCTs. This is especially true when the test will be used not only for initial certification but also to recertify or decertify practicing teachers, such as in Arkansas, and Georgia. In states such as Georgia, test development in-state has started with job analysis. Such test development is more likely to meet the Standards and the Title VII requirements for the demonstration of validity.

Court-defined Job Analysis Standards

A review of the precedent set in the evaluation of job analysis adequacy in employment test cases can be useful in guiding test developers involved in TCT development and

validation since these cases were generally also the result of Title VII complaints and have appeared in court in much greater numbers than have TCT cases to date. Such cases are invariably cited in TCT decisions.

In Griggs v. Duke Power Co. (1971), the Supreme Court established the principle of job-relatedness and by implication, the need for job analysis. In 1975, the Court reinforced the need for job analysis in Albemarle v. Moody, holding that the validation effort in this case was deficient because there had been no job analysis done. In a review of content validity cases by Kleiman and Faley (1978), the authors found that the courts were not applying uniform standards in such cases. In only a third of the thirty-one cases reviewed had job analysis been conducted for content domain definition and test development. In a 1982 review of employment test cases in which there had been job analyses, Thompson and Thompson summarized ten standards that emerged from the decisions:

> 1. A job analysis must be performed and it must be performed for the exact job for which the selection device is to be used.
> 2. The analysis must be reduced to written form, such as a job description, and the job analyst must be able to describe the procedure.
> 3. Data for the job analysis should be collected from several up-to-date sources: interviews with incumbents, supervisors and administrators; training manuals and other pertinent publications; observed on-the-job performance; and questionnaires and checklists.
> 4. The data should be collected by an expert job analyst; however, the expertise of the analyst is not sufficient to prove a "good" job analysis has been performed.
> 5. Data collected from individuals should be from a large enough sample to be relevant to every position the test is intended to cover.
> 6. Tasks, duties and activities must be identified and included in the job analysis.
> 7. All of the tasks must be covered, but it seems as if only the most important ones must be included on the test.
> 8. The relative degree of competency necessary for entry level must be specified.
> 9. Knowledge, skills and abilities are [terms] mentioned with the greatest frequency and they are necessary, usually, for construction of a content valid exam.
> 10. The courts stress the identification of tasks as prerequisite to an acceptable job analysis. (pp. 872-873)

We reviewed sixteen employment test cases that included job analyses heard since the 1982 review. As Thompson and Thompson noted (1982), we also found the necessity for job analysis had increased as compared to the earlier reviews, and that there was an increased emphasis on the conformity of job analyses to professional standards. The cases reviewed included the following decisions regarding job analysis adequacy:

1. Job incumbents are job knowledge specialists and should be part of the job analysis. Gillespie v. State of Wisconsin, 1985.
2. The job specialist or job analyst need not be trained in psychometrics, but the lack of technical expertise in the test development and validation process may draw the court to scrutinize the procedures more carefully. The presence of a qualified expert in the process does not, however, ensure adequate job analysis or test validity. Easley v. Anheuser-Busch, 1983; Gillespie v. State of Wisconsin, 1985.
3. Testing is not a precise science and even a flawed job analysis can support test validity. However, adequate job analysis does not ensure test validity. Failure to demonstrate a link between job analysis tasks and test content can result in invalid tests. U.S. v. City of Chicago, 1984.
4. Training materials (curriculum) can provide a basis for test content. Rivera v. Wichita Falls, 1982.
5. Regional or job context variability must be taken into account in test content domain definition. Incumbents sampled must be representative. Burney v. City of Pawtucket, 1983; Allen v. Isaac, 1986.
6. Task statements must not be too general. This implies that efforts to keep questionnaires short by compacting or combining task statements is an error. The criticality of tasks must be defined so that the test can cover important aspects of the job. Vulcan Pioneers v. New Jersey, 1987.
7. There is a great deal of variability in acceptable job analysis procedures, but documentation of the process is a basic necessity. Logical argument for the test content is not sufficient. Easley v. Anheuser-Busch, 1983; Police Officers v. City of Columbus, 1985.
8. Criticality of content must be established, and the test should cover those critical behaviors. Easley v. Anheuser-Busch, 1983; Police Officers v. City of Columbus, 1985.

The Standards do not specify any job analysis methodology. Similarly, the Uniform Guidelines state:

> Any method of job analysis may be used if it provides the information required for the specific validation strategy used. (p. 38300)

The Uniform Guidelines are specific, however about the

information job analysis should provide to establish content validity. In the Questions, Question 39 asks:

> Q. Are there any formal requirements imposed by these Guidelines as to who is allowed to perform a validity study?
> A. No. A validity study is judged on its own merits, and may be performed by any person competent to apply the principles of validity research, including a member of the user's staff or a consultant. (p. 12002)

Court precedent reviewed here seems to have defined the methodology of job analysis in much greater detail than was done by the publication of the Uniform Guidelines in 1978. Although most of our conclusions are similar to those of Thompson and Thompson (1982), an important difference found is the requirement for addressing regional job variability and assuring representativeness of the sample of job subject matter experts. Two recent decisions show the importance of job analysis sample representativeness. In LULAC v. State of Texas (1985), a preliminary injunction (later overturned) was granted against the use of a basic skills test for undergraduates seeking to enroll in teacher education courses. One criticism that plaintiffs had regarding the validation study was that the survey responses to questions about adequacy of preparation for the test had not been broken down by race. When there is adverse impact, demonstration of the representativeness of the sample will become an important issue if there are suspected differences in job analysis responses by race, region, gender, or some other classification considered arbitrary under Title VII or the 14th Amendment.

In a second recent development, the EEOC ruled that the Texas teacher literacy test (TECAT) "discriminated against teachers who were black or over the age of 40" (Stutz, 1988). Thus the characteristics and representativeness of the job analysis participants are critical to job analysis adequacy and the validity argument.

Conclusions

The adequacy of the job analysis is frequently the issue in litigation resulting from Title VII adverse impact in employment settings, and in general, courts seem to be specifying in greater and greater detail the requirements for a valid and reliable job analysis. As TCT precedent is set, it is likely that the adequacy of the job analyses that are used to define the content domain to be tested will be scrutinized using criteria defined in the broader employment test setting. Validation issues in high-stakes testing are likely to remain a public spectacle (Cronbach, 1988), but as Cronbach (1980) pointed out, "The battles in the headlines are far less interesting than the battles in the courts because court rulings, cumulating, become codified" (p. 100).

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Table 1

Cases related to teacher tests and the grounds for complaint

Case(s)	Reference(s)	Years	Grounds of Complaint: 14th Amend.	Title VII
Alabama: NTE	581 F. Supp. 779 631 F. Supp. 78	1983-1986	no	yes
Alabama: NES content knowledge tests	612 F. Supp. 1046 636 F. Supp. 64 816 F. 2d 575 Walden & Deaton (1988)	1981-1987	yes	yes
Arkansas: literacy tests	communication from state attorney general's office	1986	yes	yes
Georgia: NTE	407 F. Supp. 1102	1976	yes	yes
Georgia: NES content knowledge tests	original complaint	1986-1988	yes	yes
Mississippi: NTE	329 F. Supp. 706 462 F. 2d 1112	1971-1972	yes	yes
New York: administrator tests	330 F. Supp. 203 458 F. 2d 1167	1971-1972	yes	yes
North Carolina: NTE	400 F. Supp. 343 425 F. Supp. 789	1975-1977	yes	yes
South Carolina: NTE	445 F. Supp. 1094 98 S. Ct. 756 651 F. 2d 222	1977-1978 1981	yes	yes
Texas: PPST basic skills, precertification	628 F. Supp. 304 793 F. 2d 636	1985-1986	yes	no (Title VI)

Texas: TECAT literacy, certified teachers	64 ALR 4th 631	1986	no (Texas Constitution, Article I)	no
	Dallas Morning News, Sept. 13, 1988	1988	EEOC ruled test discriminatory	
Virginia: NTE	351 F. Supp. 196 418 F. Supp. 639 492 F. 2d 919 566 F. 2d 1201	1972-1977	yes	yes